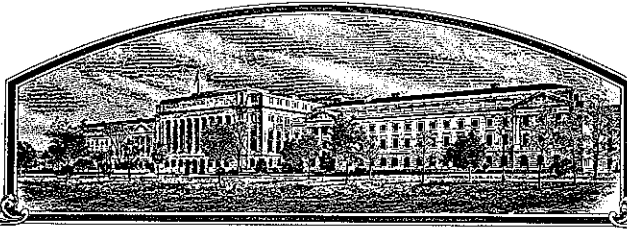


No.



9500100

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Dairyland Seed Company, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THEREOF IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF EIGHTEEN YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

ALFALFA

'MagnaGraze'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-eighth day of May in the year of our Lord one thousand nine hundred and ninety-nine.

Attest:

Ann Marie Ivo

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Wm. H. H. H. H.
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISIONAPPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(INSTRUCTIONS ON REVERSE)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Dairyland Seed Company		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO. DS9205, D/S Graze		3. VARIETY NAME MagnaGraze	
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) 3570 Hwy H West Bend, WI 53095		5. PHONE (include area code) 800 236-0163		FOR OFFICIAL USE ONLY VPPO NUMBER 9500100	
6. GENUS AND SPECIES NAME Medicago sativa L.		7. FAMILY NAME (Botanical) Leguminosae		Filing and Examination Fee: \$ 2325.00 Date MARCH 9, 1995	
8. CROP KIND NAME (Common Name) Alfalfa		9. DATE OF DETERMINATION 10/93		Certificate Fee: \$ 300.00 Date 1/25/99	
10. IF THE APPLICANT NAMED IS NOT A PERSON, GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation					
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Wisconsin		12. DATE OF INCORPORATION 12-1963			

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
~~Tom Strachota~~ **Mike Velde**
~~Dairyland Seed Company~~ **4728 S. Clinton Corners Rd.**
~~3570 Hwy H~~ **Clinton WI 53525-9728**
~~West Bend, WI 53095~~
 PHONE (include area code): **800-236-0163**

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)
- a. ☒ Exhibit A, Origin and Breeding History of the Variety
 - b. ☒ Exhibit B, Novelty Statement
 - c. ☒ Exhibit C, Objective Description of Variety
 - d. ☐ Exhibit D, Additional Description of Variety
 - e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership
 - f. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office **3-6-95**
 - g. ☒ Filing and Examination Fee (\$2,325) made payable to "Treasurer of the United States"

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act) ☐ YES (If "YES," answer items 16 and 17 below) ☒ NO (If "NO," skip to item 18 below)

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED


18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? ☐ YES (If "YES," through ☐ Plant Variety Protection Act ☐ Patent Act. Give date: _____) ☒ NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES? ☒ YES (If "YES," GIVE NAMES OF COUNTRIES AND DATES) **United States 4/94** ☐ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s)) 	CAPACITY OR TITLE CHIEF EXECUTIVE OFFICER	DATE 3-6-95
SIGNATURE OF APPLICANT (Owner(s))	CAPACITY OR TITLE	DATE

INSTRUCTIONS

9500100

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A,B,C,E; (3) at least 2,500 viable untreated seeds; (4) check, drawn on a U.S. bank, payable to "Treasurer of the United States" in the amount of \$2,325 (\$275 filing fee and \$2,050 examination fee). (See section 180.175 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for 30 days, then returned to the applicant as unfilled. Mail application and other requirements to: Plant Variety Protection Office, AMS, USDA, Rm. 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the Application are self-explanatory unless noted below. Corrections on the Application form and Exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a Certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$275 for issuance of the Certificate.

Plant Variety Protection Office
Telephone: 301/504-5518

ITEM

9. Give the date when there has been at least a tentative determination that the variety has been sexually reproduced with recognized characteristics, whether or not the novelty of those characteristics has been determined. (See section 41(d) of the Plant Variety Protection Act (Act).)
- 14a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability. (See sections 41 and 52 of the Act.)
- 14b. Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons which clearly indicate novelty.
- 14c. Exhibit C forms are available from the PVPO; specify crop kind. Fill in the Exhibit C (Objective Description of Variety form) to describe your variety.
- 14d. Optional additional characteristics and/or photographs: Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 14e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.
15. If "Yes" is specified (*seed of this variety be sold by variety name only as a class of certified seed*), the applicant may NOT reverse this affirmative decision after the variety has either been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See section 180.16 of the Regulations and Rules of Practice.)
19. See sections 41 (i,j) and 42 of the Act and section 180.7 of the Regulations and Rules of Practice for eligibility requirements.

NOTES:

It is the responsibility of the applicant/owner to keep the PVPO informed of any change of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment is \$25. (See section 101 of the Act, and sections 180.130, 180.131, 180.132, and 180.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Rm. 213, Building 306, Beltsville Agricultural Research Center -- East, Beltsville, MD 20705. Telephone: 301/504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, Room 404-W Administration Building, Washington, DC 20250; and to the Office of Management and Budget, Paperwork Reduction Project, Washington, DC 20503, regarding OMB 0581-0055.

EXHIBIT A

MagnaGraze is a synthetic variety with 224 parent clones developed by Dairyland Research International. One half of the parental clones were selected out of three year old forage yield plots for the deep-set crown trait. The percent of this source material traces back to Answer (4), Apollo (12), and Dairyland Experimentals (34). Dairyland Experimentals trace back to T1-400xM193, T1-400xV139, V139, and T9-571-39xAns3-1)xB59-3-6. The other half of parental material was selected out of disease nurseries in Clinton and Marshfield, Wisconsin. The percent of this source material can be traced back to RamRod(DS504)(4), Pro Cut II(17), Aggressor(2), Legacy(6), Precedent(7), BlazerXL(6), Starmaster(6), Zenith(1) and DK122(1). Parent plants from each germplasm group were interplanted in cage isolation and interpollinated by honey and leafcutter bees in Sloughhouse, CA in 1991 and bulked to produce Syn. 1 as Breeder seed. MagnaGraze appears to be uniform and stable with no variants observed for three years.

EXHIBIT B

MagnaGraze is most similar to the variety Answer.

MagnaGraze is a novel variety because of its high resistance to Phytophthora root rot(66%), bacterial wilt(78%), Fusarium wilt(74%), pea aphid(51%); resistance to anthracnose (Race1) (36%), Verticillium wilt(47%), Aphanomyces root rot(Race1) (38%), spotted alfalfa aphid(45%); moderate resistance to stem nematode(29%), blue alfalfa aphid(22%) and low resistance to northern root-knot nematode(17%); where as Answer is highly resistant to Phytophthora root rot(57%), Fusarium wilt(57%) resistant to bacterial wilt(42%) low resistance to anthracnose(Race1) (14%) and spotted alfalfa aphid (10%).

The flower color is approximately 88% purple and 12% variegated while Answer is 96% blue and purple, 3.5% variegated and .5% white. MagnaGraze has a deeper set crown placement than Magnum III, AlfaGraze and Vernal(note Appendix A).

MagnaGraze provides a combination of disease, insect and nematode resistance in a variety with the deep set crown trait.

**Crown Depth Measurements
1992 Forage Yield Trial
Clinton, Wisconsin**

	Percent of Plants at each Crown Depth						Mean Depth
	1/4 inch	1/2 inch	3/4 inch	1 inch	1 1/4 inches	1 1/2 inches	
MagnaGraze	12	24	27	13	15	9	.81
Magnum III	13	50	27	10	0	0	.59
Alfagraze	25	63	12	0	0	0	.47
Vernal	33	35	24	8	0	0	.52
Lsd (.05)							.21
CV (%)							9.00

Data Collected: 10/93

**Crown Depth Measurements
1992 Forage Yield Trial
Clinton, Wisconsin**

	Percent of Plants at each Crown Depth						Mean Depth
	1/4 inch	1/2 inch	3/4 inch	1 inch	1 1/4 inches	1 1/2 inches	
MagnaGraze	10	19	22	27	14	8	.85
Magnum III	40	27	20	13	0	0	.52
Alfagraze	25	32	29	11	0	3	.60
Vernal	4	33	38	17	0	8	.75
Lsd (.05)							.10
CV (%)							13.00

Data Collected: 10/94

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK AND SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705OBJECTIVE DESCRIPTION OF VARIETY
ALFALFA (*Medicago sativa* sensu Gunn et al.)

NAME OF APPLICANT(S) Dairyland Seed Company	TEMPORARY DESIGNATION DS9205, D/S Graze	VARIETY NAME MagnaGraze
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) 3570 Hwy H, West Bend, WI 53095		FOR OFFICIAL USE ONLY PVPO NUMBER 9500100

PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place numbers in the boxes to designate the expressions which are characteristic of the commercial generations of the application variety. Data for quantitative plant characters should be based on a minimum of 100 plants. Include leading zeros when necessary (e.g., 0 8 9) for quantitative data. Comparative data should be determined from varieties entered in the same trial. Plant color may be precisely designated by using any recognized color chart, e.g., The Munsell Plant Tissue Color Charts.

1. WINTERHARDINESS:

7

CLASS:

1 = Very Non-Winterhardy (CUF 101)

2 = Non-Winterhardy (Moapa 69)

3 = Intermediately Non-Winterhardy (Mesilla)

4 = Semi-Winterhardy (Lahontan)

5 = (Du Puits)

6 = Moderately Winterhardy (Saranac)

7 = (Ranger)

8 = Winterhardy (Vernal)

9 = Extremely Winterhardy (Norseman)

TEST LOCATION: Clinton, WI

2. FALL DORMANCY:

FALL DORMANCY (DETERMINED FROM SPACED PLANTINGS)

TESTING INSTITUTION AND LOCATION	DATE OF LAST CUT	DATE REGROWTH SCORED	REGROWTH SCORE OR AVERAGE HEIGHT				LSD .05
			APPLICATION VARIETY	CHECK VARIETIES*			
				Vernal	Ranger	Saranac	
Dairyland Research Clinton, WI	8/94	10/94	6.85	5.0	7.0	7.80	.90

* CUF 101, Moapa 69, Mesilla, Lahontan, Du Puits, Saranac, Ranger, Vernal, or Norseman as appropriate.

Specify scoring system used: Fall growth measured in inches**5**

Fall Growth Habit (Determined from Fall Dormancy Trials)

1 = Erect (CUF 101)

3 = Semierect (Mesilla)

5 = Intermediate (Saranac)

7 = Semidecumbent (Vernal)

9 = Decumbent (Norseman)

3. RECOVERY AFTER FIRST SPRING CUT (In Southwest, first cut after March 21):

3

1 = Very Fast (CUF 101)

3 = Fast (Saranac)

5 = Intermediate (Ranger)

7 = Slow (Vernal)

9 = Very Slow (Norseman)

TEST LOCATION: Clinton, WI

4. AREAS OF ADAPTATION IN U.S. (Where tested and proven adapted):

1

Primary Area of Adaptation

2**6**

Other Areas of Adaptation

1 = North Central

2 = East Central

3 = Southeast

4 = Southwest

5 = Moderately Winterhardy Intermountain

6 = Winterhardy Intermountain

7 = Great Plains

8 = Other (Specify) _____



5. FLOWERING DATE (When 10% of plants possess open flowers at time of first spring cut):

0 2

Days Earlier Than

4

Same As

3

1 = CUF 101

2 = Mesilla

3 = Saranac

4 = Vernal

5 = Norseman

0 3

Days Later Than

2TEST LOCATION: Clinton, WI

6. PLANT COLOR (Determined from healthy regrowth 3 weeks after first spring cut, controlling leafhoppers if necessary):

3 1 = Very Dark Green (524) 2 = Dark Green (Vernal) 3 = Light Green (Ranger)

9500100

COLOR CHART VALUE (Specify chart used: Munsell Color Charts 7.5GY):APPLICATION VARIETY: 7/10VERNAL: 6/10TEST LOCATION: Clinton, WI

7. CROWN TYPE (Determined from spaced plantings):

2 Noncreeping Types: 1 = Broad (Vernal) 2 = Intermediate (Saranac) 3 = Narrow (CUF 101)
Creeping Types: 4 = Creeping Rooted (Rangelander) 5 = Rhizomatous (Rhizoma)

8. FLOWER COLOR (Determine frequency of plants for each color class as defined by USDA Agricultural Handbook No. 424 (Barnes 1972), allowing all plants in plot to flower):

0 8 8 % Purple and Violet (Subclasses 1.1 to 1.4) 0 0 0 % Blue (Subclasses 2.3 and 2.4)
0 1 2 % Variegated Other Than Blue (Subclasses 2.4, 2.2, 2.5 to 2.9) 0 0 0 % Yellow (Subclasses 4.1 to 4.4)
0 0 0 % Cream (Class 3) 0 0 0 % White (Class 5)

TEST LOCATION: Homedale, ID

9. POD SHAPE (Determine frequency of plants with the following pod shapes produced on well cross-pollinated racemes):

0 4 5 % Tightly Coiled (One or more coils, center more or less closed) 0 4 5 % Loosely Coiled (One or more coils, center conspicuously open)
0 1 0 % Sickle (Less than 1 coil)

TEST LOCATION: Sloughhouse, CA

10. PEST RESISTANCE: Provide in the appropriate column, trial data for application variety, and resistant (R) and susceptible (S) check varieties, synthetic generation tested, average severity index scores (ASI), least significant difference statistics (LSD .05), the institution in charge of test, year, and location of test, and whether test is a field or laboratory evaluation. Describe scoring system, and any test procedure which differs from standard methods proposed by Elgin (1982). Trial data from other test years or locations should be presented whenever available on a separate document as Exhibit D. Seeds of the check varieties and germplasm lines listed below can be obtained from the USDA Field Crops Laboratory, Bldg. 001, Rm. 335, BARC-West, Beltsville, MD 20705. Although comparisons with check varieties listed below are preferred, comparisons with any appropriate check variety recommended by Elgin (1982) may be presented.

A. DISEASE RESISTANCE:

A. DISEASE RESISTANCE:	DISEASE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Anthracnose, Race 1 (<i>Colletotrichum trifolii</i>)	Application		1	35.90	115	--		Dairyland Research 1992, Clinton, WI Laboratory
	Arc (R) Saranac AR			45.00	105	--		
	Saranac (S)			00.00	130	--		
	SCORING SYSTEM: Resistant=healthy, disease free seedlings; Susceptible=lesioned or dead seedlings							
Anthracnose, Race 2 (<i>Colletotrichum trifolii</i>)	Application							
	Saranac AR (R)							
	Arc (S)							
	SCORING SYSTEM:							
Bacterial Wilt (<i>Corynebacterium insidiosum</i>)	Application		2	78.00	108	1.26	.31	Dairyland Research 1994, Clinton, WI Laboratory
	Vernal (R)			42.00	100	3.03		
	Narragansett (S)			00.00	100	4.00		
	SCORING SYSTEM: Plants scored 0-5, 0+1=Resistant							
Common Leafspot (<i>Pseudopeziza medicaginis</i>)	Application							
	MSA-CW3AN3 (R)							
	Ranger (S)							
	SCORING SYSTEM:							

10. A. PEST RESISTANCE (Continued):

DISEASE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Downy Mildew (<i>Peronospora trifoliorum</i>) Isolate, if known:	Application						
	Saranac (R)						
	Kanza (S)						
	SCORING SYSTEM:						
Fusarium Wilt (<i>Fusarium oxysporum</i> f. <i>medicaginis</i>)	Application	2	74.00	110	1.54	.21	Dairyland Research 1994, Clinton, WI Laboratory
	Moapa-60 (R)		54.00	115	2.43		
	Agate		5.00	100	3.12		
	Narragansett (R)						
SCORING SYSTEM: Plants scored 0-5, 0+1=Resistant							
Phytophthora Root Rot (<i>Phytophthora megasperma</i> f. <i>medicaginis</i>)	Application	1	65.70	100	--		Dairyland Research 1992, Clinton, WI Laboratory
	Agate (R)		43.00	100	--		
	Saranac (S)		00.00	115	--		
	SCORING SYSTEM: Resistent=healthy, disease free seedlings Susceptible=stunted or dead seedlings						
Verticillium Wilt (<i>Verticillium albo-atrum</i>)	Application	1	46.80	120	2.20	.38	Dairyland Research 1992, Clinton, WI Laboratory
	Oneida VR		60.00	100	1.80		
	Saranac (S)		5.20	100	4.00		
	SCORING SYSTEM: Plants scored 1-5, 1+2=Resistant						
Other (Specify) Aphanomyces Root Rot (Race 1) Aphanomyces euteiches	Application	2	37.70	115	2.60	.50	Dairyland Research 1994, Clinton, WI Laboratory
	(R) WAPH-1		50.00	115	2.10		
	(S) Agate		2.77	100	3.90		
	SCORING SYSTEM: Plants Scored 1-5, 1+2=Resistant						
Other (Specify)	Application						
	(R)						
	(S)						
	SCORING SYSTEM:						
B. INSECT RESISTANCE:							
INSECT	VARIETY	SYN. GEN. TESTED	PERCENT DEFOLIATION	DEFOLIATION IN PERCENT OF RESISTANT CHECK	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Alfalfa Weevil (<i>Hypera postica</i>)	Application						
	Arc (R)			100			
	Saranac (S)						
	SCORING SYSTEM:						

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT SEEDLING SURVIVAL	NUMBER OF SEEDLINGS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Blue Alfalfa Aphid (<i>Acyrtosiphon kondoi</i>)	Application	2	21.78	120	3.80	.60	Dairyland Research 1993 Sloughhouse, CA Laboratory
	CUF 101 (R)		55.00	120	2.30		
	PA-1 (S)		00.00	120	4.30		

SCORING SYSTEM:

Plants scored 1-5, 1+2+3=Resistant

Pea Aphid (<i>Acyrtosiphon pisum</i>)	Application	2	50.98	150	2.50	.40	Dairyland Research 1994 Sloughhouse, CA Laboratory
	Kanza (R) CUF101		55.00	171	2.10		
	Ranger (S) Moapa69		7.38	170	4.10		

SCORING SYSTEM:

Plants scored 1-5, 1+2+3=Resistant

Spotted Alfalfa Aphid (<i>Therioaphis maculata</i>) Biotype, if known:	Application	1	45.30	120	2.20	.50	Dairyland Research 1993 Sloughhouse, CA Laboratory
	Kanza (R) CUF101		60.00	120	1.90		
	Ranger (S) Caliverde		00.00	120	4.80		

SCORING SYSTEM:

Plants scored 1-5, 1+2=Resistant

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Potato Leafhopper Yellowing (<i>Empoasca fabae</i>)	Application						
	MSA-CW3An3 (R)						
	Ranger (S)						

SCORING SYSTEM:

Other (Specify)	Application						
	(R)						
	(S)						

SCORING SYSTEM:

C. NEMATODE RESISTANCE:

NEMATODE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Northern Root Knot (<i>Meloidogyne hapla</i>)	Application	1	17.00	100	2.99	.62	Dairyland Research 1992 Clinton, WI Laboratory
	Nev. Syn. XX (R)		90.00	100	1.30		
	Lathana (S) ApolloII		7.48	100	3.29		

SCORING SYSTEM:

Plants scored 1-4, 1=Resistant

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)

Dairyland Seed Company

2. TEMPORARY DESIGNATION
OR EXPERIMENTAL NUMBER
DS9205, D/S
Graze

3. VARIETY NAME

MagnaGraze

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)

3570 Hwy H

West Bend, WI 53095

5. TELEPHONE (include area code)

1-800-236-0163

6. FAX (include area code)

1-414-626-2281

7. PVPO NUMBER

9500100

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☐ YES ☒ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?
If no, give name of country

☒ YES ☐ NO

10. Is the applicant the original breeder? If no, please answer the following:

☒ YES ☐ NO

a. If original rights to variety were owned by individual(s):

Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country

☐ YES ☐ NO

b. If original rights to variety were owned by a company:

Is the original breeder(s) U.S. based company? If no, give name of country

11. Additional explanation on ownership (If needed, use reverse for extra space):

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

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NEMATODE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Southern Root Knot (<i>Meloidogyne incognita</i>)	Application						
	Moapa 69 (R)						
	Lahontan (S)						
	SCORING SYSTEM:						
Stem Nematode (<i>Ditylenchus dipsaci</i>)	Application	2	28.57	145	3.50	.40	Crop Characterist 1993, Northfield MN Laboratory
	Lahontan (R)		50.00	110	2.90		
	Ranger (S)		12.27	115	3.80		
	SCORING SYSTEM:						
Other (Specify)	Application						
	(R)						
	(S)						
	SCORING SYSTEM:						

11. INDICATE THE VARIETY THAT MOST CLOSELY RESEMBLES THE APPLICATION VARIETY FOR EACH OF THE FOLLOWING CHARACTERS:

CHARACTER	VARIETY	CHARACTER	VARIETY
Winterhardiness	Ranger	Plant Color	Ranger
Recovery After 1st Cut	Saranac	Crown Type	Saranac
Area of Adaptation	Ranger	Combined Disease Resistance	GH777
Flowering Date	Saranac	Combined Insect Resistance	Hyland

REFERENCES

Barnes, D.K. 1972. A System for Visually Classifying Alfalfa Flower Color. U.S. Dep. Agric. Handb. 424. 18 pp. (Note: Greenish cast of plate 6, A and B is an artifact of printing, actual colors a blend of yellow and white.)

Elgin, J.H., Jr., (ed.). 1982. Standard Tests to Characterize Pest Resistance in Alfalfa Cultivars. U.S. Dep. Agric. Tech. Bull. (In Press).

Gunn, C.R., W.H. Skrdla, and H.C. Spencer. 1978. Classification of *Medicago sativa* L. using legume characters and flower colors. U.S. Dep. Agric. Tech. Bull. 1574. 84 pp.

Munsell Color Co. 1977. Munsell Plant Tissue Color Charts. Munsell Color Co., Inc. Baltimore.

NOTE: Any additional descriptive information and supporting documentation may be provided as Exhibit D.